

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for generating an avatar animation transform, comprising:

providing a neutral-face front head image and a side head image for generating an avatar;

automatically finding head feature locations on the front head image and the side head image using elastic bunch graph matching;

automatically positioning nodes within feature locations on the front head image and the side head image, including at least one node substantially centered within an interior of a feature location; and

manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

2. (Original) A method for generating an avatar animation transform as defined in claim 1, further comprising generating an animation transform based on the corrected node positions for the neutral face.

3. (Original) A method for generating an avatar animation transform as defined in claim 2, further comprising applying the animation transform to expression face avatar meshes for generating the avatar.

4. (Original) A method for generating an avatar animation transform as defined in claim 2, further comprising applying the animation transform to morph targets.

5. (Currently Amended) A system for generating an avatar animation transform, comprising:

means for providing a neutral-face front head image and a side head image for generating an avatar;

means for automatically finding head feature locations on the front head image and the side head image using elastic bunch graph matching;

means for automatically positioning nodes within feature locations on the front head image and the side head image, including at least one node substantially centered within an interior of a feature location; and

means for manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

6. (Original) A system for generating an avatar animation transform as defined in claim 5, further comprising means for generating an animation transform based on the corrected node positions for the neutral face.

7. (Original) A system for generating an avatar animation transform as defined in claim 6, further comprising means for applying the animation transform to expression face avatar meshes for generating the avatar.

8. (Original) A system for generating an avatar animation transform as defined in claim 6, further comprising means for applying the animation transform to morph targets.

9. (Currently Amended) A method for generating an avatar animation transform, comprising:

providing a neutral-face front head image and a side head image for generating an avatar;

automatically finding head feature locations on the front head image and the side head image using image analysis based on wavelet component values generated from wavelet transformations of the respective neutral-face front head image and the side head image;

automatically positioning nodes within feature locations on the front head image and the side head image, including at least one node substantially centered within an interior of a feature location; and

manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

10. (Original) A method for generating an avatar animation transform as defined in claim 9, further comprising generating an animation transform based on the corrected node positions for the neutral face.

11. (Original) A method for generating an avatar animation transform as defined in claim 10, further comprising applying the animation transform to expression face avatar meshes for generating the avatar.

12. (Original) A method for generating an avatar animation transform as defined in claim 10, further comprising applying the animation transform to morph targets.

13. (Original) A method for generating an avatar animation transform as defined in claim 9, wherein the wavelet transformations use Gabor wavelets.

14. (Previously Presented) A method for generating an avatar animation transform as defined in claim 1, further comprising mapping sensed facial features to corresponding avatar meshes using linear regression.

15. (Previously Presented) A method for generating an avatar animation as defined in claim 9, further comprising mapping sensed facial features to corresponding avatar meshes using linear regression.

16. (Previously Presented) A system for generating an avatar animation transform as defined in claim 5, further comprising a means for mapping sensed facial features to corresponding avatar meshes using linear regression.

17. (Previously Presented) A method for generating an avatar animation transform as defined in claim 1, further comprising creating the avatar based on geometric information associated with the automatically found head feature locations.

18. (Previously Presented) A method for generating an avatar animation as defined in claim 9, further comprising creating the avatar based on geometric information associated with the automatically found head feature locations.

19. (Previously Presented) A system for generating an avatar animation transform as defined in claim 5, further comprising a means for creating the avatar based on geometric information associated with the automatically found head feature locations.